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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/645,245 | 08/21/2003 | Wayne G. Floe | 6605A | 7547 |
| 7590 | 01/18/2005 | | EXAMINER | |
| Charles A. Johnson 1448 90th Avenue Amery, WI 54001 | | | LEE, JONG SUK | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3673 | |

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|----------------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/645,245 | FLOE ET AL. | |
| | Examiner | Art Unit | |
| | Jong-Suk (James) Lee | 3673 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) 32-37 is/are allowed.
- 6) Claim(s) 1,2,16-18,21,28 and 38 is/are rejected.
- 7) Claim(s) 3-15,19,20,22-27,29-31 and 39-45 is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/21/2003</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of Group I directed to claims 1-31 in the reply filed on October 28, 2004 is acknowledged.

However, Applicant's argument with respect to the restriction requirement is persuasive and therefore, the restriction requirement is hereby withdrawn and action on the merit for all claims follows.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because of the phrase "The present invention features a boatlift leg and frame structure utilizing...." in line 1. It is suggested to be -- A boatlift leg and structure utilizes.... -- Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 21 is objected to because of the following informalities:

Claim 21, line 7: "an associated boatlift leg" should be -- said associated boatlift leg --.

Claim 21, lines 10-11: "an associated boatlift leg" should be -- said associated boatlift leg --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 21 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Hey (US 5,908,264).

Hey discloses a watercraft lift comprising: a footpad (40); a height adjustment mechanism (38) for use in colinear alignment with an associated boatlift leg and having a first end portion coupled to said footpad and having a second end portion; and a height adjustment actuator/sleeve with a pin (36) accessible along an associated boatlift leg and coupled to said second end portion at a predetermined angle with respect to said alignment, whereby the relationship of said footpad with respect to an associated boatlift leg can be controlled (see Fig. 1: col.3, lines 53-67; col.4, lines 1-42).

7. Claim 38 is rejected under 35 U.S.C. 102(b) as being anticipated by Holmgren (US 5,655,850).

The preamble limitation, "For use with a power boatlift having a lifting structure including a ball screw mechanism and a winch cable for raising and lowering a lifting Structure" in lines 1-3 is intended use and no patentable weight is given to the preamble.

Holmgren discloses a drive unit comprising: an electric drive means (80) for providing power to the lifting structure for causing raising and lowering of the lifting structure by controlling the direction of rotation of a ball screw mechanism (83, 84, 86), said drive motor means including power input means for connecting to a source of electrical power; inherent switch means for applying direction control signals to said electric drive means; and logic means responsively coupled to said control signals for controlling the operation of said electric drive means to control the raising or lowering of the lifting structure (see Fig. 5: col.4, lines 27-55).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLaughlin et al (US 6,230,639) in view of Holmgren. The teachings of Holmgren have been discussed above.

McLaughlin et al discloses a boat lift comprising: a plurality of support legs (14); a boat lifting structure (22) moveably mounted to said plurality of support legs; a cable assembly (40, 44) having a connecting end and a lifting end connected in cooperation with said boat lifting structure for causing said boat lifting structure to be raised or lowered; an electric drive unit (12) having a drive shaft (54, 56) capable of rotating in a first direction in response to a first input signal or rotating in a second direction in response to a second input signal; a drive coupling structure (52) coupled to said drive shaft (see Figs. 1-5; col.4, lines 11-67; col.5, lines 1-67; col.6, lines 1-21).

However, McLaughlin et al fails to disclose or fairly suggest a ball screw assembly having a first portion coupled to said coupling structure and a second portion coupled to said connecting end.

Holmgren discloses a drive unit comprising: an electric drive means (80) for providing power to the lifting structure for causing raising and lowering of the lifting structure by controlling the direction of rotation of the ball screw mechanism (83, 84, 86) having a first portion coupled to said coupling structure and a second portion coupled to said connecting end (Fig. 5), wherein said first portion of said ball screw assembly includes an elongated ball screw having a driving end coupled to said coupling structure wherein said coupling structure rotatably supports said driving end, and said second portion of said ball screw assembly includes a ball nut (83, 94) associated with said elongated ball screw, said ball screw having a cable connection coupled to said connecting end of said cable assembly (see Fig. 5: col.4, lines 11-67; col.5, lines 1-67; col.6, lines 1-21) as discussed in Paragraph No. 7.

Therefore, in view of Holmgren, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to replace the drive unit of McLaughlin with the drive with the ball screw mechanism in order to enhance the preciseness for the control of the boatlift device.

With respect to the brake mechanism, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to have a conventional brake system to the drive assembly in case of emergency handling situation for the boat lift device.

10. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLaughlin et al, as modified by Holmgren, as applied to claim 1, further in view of Hey. The teachings of McLaughlin, Holmgren and Hey have been discussed above.

However, the teachings of McLaughlin modified by Holmgren fail to disclose or fairly suggest the boatlift leveling mechanism. Hey discloses a watercraft lift comprising: a footpad (40); a height adjustment mechanism (38) for use in colinear alignment with an associated boatlift leg and having a first end portion coupled to said footpad and having a second end portion; and a height adjustment actuator/sleeve with a pin (36) accessible along an associated boatlift leg and coupled to said second end portion at a predetermined angle with respect to said alignment, whereby the relationship of said footpad with respect to an associated boatlift leg can be controlled as discussed in Paragraph No. 6.

Therefore, in view of Hey, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to add the boat leveling mechanism to the leg of

McLaughlin's boat lift, as modified by Holmgren in order to enhance the stability of the boat lift to the desired installation site.

Allowable Subject Matter

11. Claims 32-37 would be allowable over the prior art of record.
12. Claims 3-15, 19, 20, 22-27, 29-31 and 39-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other references cited disclose a hydraulic boat lift, a programmable boat lift control system and a lifter and support apparatus with adjustable legs.
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jong-Suk (James) Lee whose telephone number is (703) 308-6777. The examiner can normally be reached on 6:30 am to 3:00 pm, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford, can be reached on (703) 308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Lee /jjl
January 7, 2005



**Jong-Suk (James) Lee
Primary Examiner
Art Unit 3673**